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S. Peter Ludwig  
DARBY & DARBY P.C.  
P.O. Box 5257  
New York, NY 10150-5257

EXAMINER

HENNING, MATTHEW T

ART UNIT

PAPER NUMBER

2131

DATE MAILED: 04/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/037,109

Applicant(s)

MARGALIT ET AL.

Examiner

Matthew T. Henning

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-243 is/are pending in the application.
- 4a) Of the above claim(s) 89-112, 148-171 and 207-230 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-88, 113-147, 172-206 and 231-243 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

This action is in response to the communication dated 1/23/2006.

***Response to Arguments***

Applicants' arguments with respect to claims 1-88, 113-147, 172-206, and 231-243, were not found persuasive. Applicants' argue primarily that the two characteristics relied upon by the examiner in both Le Pennec and Stewart are not "two different corresponding characteristics".

With regards to Le Pennec, Le Pennec disclosed the comparison of "two characteristics", including a current file signature, and an original file signature that had been calculated previously (See Le Pennec Paragraphs 0124 and 0192). Clearly these are two characteristics, but contrary to the applicants' argument, these are also "different" and "corresponding" characteristics as well. It is easily seen that they are different as one signature, the file signature calculated by the VCF (virus-free Certificate Firewall), was calculated on the fly, during the comparison step (See Le Pennec Paragraph 0192) and the other signature, the signature comprised within the VC (virus-free Certificate) for the file, was calculated prior to the comparison step by the VCA (virus-free Certificate Authority) (See Le Pennec Paragraph 0124). Not only are they separate and distinct, as just shown, but they are also compared, which implies that they are not the same. If they were the same signature, there would be no need to compare the two as it would be inherent that they were the same. Therefore, it is seen that the two signatures are different. Further, the two signatures are both signatures of the same file, and therefore they are corresponding. As such, the two signatures, contrary to the applicants' assertion, are in fact "two different corresponding characteristics" and as such the examiner does not find the argument persuasive.

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1 With regards to Stewart, Stewart clearly disclosed analyzing the extension type (See  
2 Stewart Col. 3 Lines 45-65) with respect to the file content (See Stewart Col. 3 Line 65 – Col. 4  
3 Line 3). Therefore, Stewart did in fact disclose “two different corresponding characteristics” and  
4 as such, the examiner does not find the argument persuasive.

5 Further, please note the new ground(s) of rejection necessitated by the amendment to the  
6 claims.

7 All objections and rejections not presented below have been withdrawn.

8 Claims 1-88, 113-147, 172-206, and 231-243 have been examined.

9 ***Specification***

10 Applicant is reminded of the proper language and format for an abstract of the disclosure.

11  
12 *The abstract should be in narrative form and generally limited to a single paragraph on*  
13 *a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed*  
14 *150 words in length since the space provided for the abstract on the computer tape used by the*  
15 *printer is limited. The form and legal phraseology often used in patent claims, such as "means"*  
16 *and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist*  
17 *readers in deciding whether there is a need for consulting the full patent text for details.*

18  
19 *The language should be clear and concise and should not repeat information given in the*  
20 *title. It should avoid using phrases which can be implied, such as, "The disclosure concerns,"*  
21 *"The disclosure defined by this invention," "The disclosure describes," etc.*

22  
23 The abstract of the disclosure is objected to because:

24 The abstract of the disclosure fails to sufficiently describe the disclosed invention. In  
25 particular the abstract is silent with respect to the “different corresponding characteristics”, the  
26 gateway implementing the disclosed invention, or the types of characteristics being compared.  
27 As such, the abstract does not provide an ample description of the invention as disclosed in the  
28 specification and therefore would not properly assist a reader of the abstract in deciding whether  
29 to consult the full patent text. Appropriate correction is required.

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***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless –*

*(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.*

*(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.*

**Claims 1-14, 17-36, 39-44, 67-80, 83-88, 126-139, and 142-147 are rejected under 35 U.S.C. 102(b) as being anticipated by Curtis ("Top 10 Tips for Avoiding Viruses").**

Regarding claim 1, Curtis disclosed a method of detecting malicious content comprising: examining at least two different corresponding characteristics of a digital object (See Curtis Section 8 Type, Icon, Extension); analyzing said at least two characteristics to determine whether there exists a mismatch therebetween (See Curtis Section 8); and upon determination of the existence of a mismatch, classifying said digital object as a digital object possibly containing malicious content (See Curtis First Paragraph and Section 8).

Regarding claim 23, Curtis disclosed a method of detecting malicious content comprising: obtaining information relating to at least two different corresponding characteristics of a digital object (See Curtis Section 8); analyzing said information to categorize said digital

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1 object into at least two categories (See Curtis Section 8); comparing said at least two categories  
2 to decide whether there exists a mismatch therebetween (See Curtis Section 8); upon  
3 determination of the existence of a mismatch, classifying said digital object as a digital object  
4 possibly containing malicious content (See Curtis First Paragraph and Section 8).

5 Regarding claim 67, Curtis disclosed a system for detecting malicious content  
6 comprising: a digital object examiner (Implementer of Curtis), examining at least two different  
7 corresponding characteristics of a digital object (See Curtis Section 8); a characteristics  
8 mismatch detector (Implementer of Curtis), analyzing said at least two characteristics to  
9 determine whether there exists a mismatch therebetween (See Curtis Section 8); and a digital  
10 object classifier (Implementer of Curtis), operative upon determination of the existence of a  
11 mismatch, classifying said digital object as a digital object possibly containing malicious content  
12 (See Curtis First Paragraph and Section 8).

13 Regarding claim 126, Curtis disclosed a system for detecting malicious content  
14 comprising: a digital object information obtainer, obtaining information related to at least two  
15 different corresponding characteristics of a digital object (See Curtis Section 8); a characteristic  
16 based categorizer, categorizing said information into at least two categories (See Curtis Section  
17 8); a categories mismatch detector, analyzing said at least two categories to determine whether  
18 there exists a mismatch therebetween (See Curtis Section 8); and a digital object classifier,  
19 operative upon determination of the existence of a mismatch, classifying said digital object as a  
20 digital object possibly containing malicious content (See Curtis First Paragraph and Section 8).

21 Regarding claims 2-3, 24-25, 68-69, 127-128, Curtis disclosed that malicious content  
22 comprises malicious code and masqueraded content (See Curtis First Paragraph and Section 8).

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1           Regarding claims 4-6, 26-28, 70-72, 129-131, Curtis disclose that one of the  
2 characteristics is selected from header information, file content, file name extension, and file  
3 icon (See Curtis Section 8).

4           Regarding claims 7-12, 29-34, 73-78, 132-137, Curtis disclosed that the digital object is  
5 one of a file, an e-mail attachment, a web page, and a storage medium (See Curtis Section 8).

6           Regarding claims 13-14, 35-36, 79-80, 138-139, Curtis disclosed that the digital object  
7 was a file and e-mail attachment (See Curtis Section 8).

8           Regarding claims 17-22, 39-44, 83-88, 142-147, Curtis disclosed that the characteristics  
9 comprised header information (subject); file content (extension); file name extension; and file  
10 icon (See Curtis Section 8).

11  
12  
13           **Claims 1-14, 17-22, 67-80, and 83-88 are rejected under 35 U.S.C. 102(e) as being**  
14 **anticipated by Le Penneç et al. (US Patent Application Publication 2001/0020272)**  
15 **hereinafter referred to as Le Pennec.**

16           Regarding claim 1, Le Pennec disclosed a method of detecting malicious content  
17 comprising: examining at least two characteristics of a digital object (See Le Pennec Paragraph  
18 0192); analyzing said at least two different corresponding characteristics to determine whether  
19 there exists a mismatch therebetween (See Le Pennec Paragraph 0192); and upon determination  
20 of the existence of a mismatch, classifying said digital object as a digital object possibly  
21 containing malicious content (See Le Pennec Paragraph 0198).

22           Regarding claim 67, Le Pennec disclosed a system for detecting malicious content  
23 comprising: a digital object examiner, examining at least two different corresponding

1 characteristics of a digital object (See Le Pennec Paragraph 0192); a characteristics mismatch  
2 detector, analyzing said at least two characteristics to determine whether there exists a  
3 mismatch therebetween (See Pennec Paragraph 0192); and a digital object classifier, operative  
4 upon determination of the existence of a mismatch, classifying said digital object as a digital  
5 object possibly containing malicious content (See Le Pennec Paragraph 0198).

6 Regarding claims 2-3, and 68-69, Le Pennec disclosed that malicious content comprises  
7 malicious code, and masqueraded content (See Le Pennec Paragraphs 0009-0017).

8 Regarding claims 4-6, 17-22, 70-72, and 83-88, Le Pennec disclosed that at least one of  
9 said at least two characteristics is selected from a set consisting of: header information; file  
10 content; file name extension; and file icon (See Le Pennec Paragraph 0192 wherein the  
11 signature of the file was computed which includes all of the listed characteristics of the file).

12 Regarding claims 7-14, and 73-80, Le Pennec disclosed said digital object is selected  
13 from a set consisting of: a file; an e-mail attachment; a web page; and a storage medium (See  
14 Le Pennec Paragraph 0023).

15 **Claims 23-36, 39-40, 44, 126-139, 142-143, 147, and 172-184 are rejected under 35**  
16 **U.S.C. 102(e) as being anticipated by Stewart et al. (US Patent Number 6,901,519)**  
17 **hereinafter referred to as Stewart.**

18 Regarding claims 23 and 126, Stewart disclosed a method of detecting malicious content  
19 comprising: obtaining information relating to at least two different corresponding characteristics  
20 of a digital object (See Stewart Col. 3 Line 46 – Col. 4 Line 3); analyzing said information to  
21 categorize said digital object into at least two categories (See Stewart Col. 3 Line 46 – Col. 4  
22 Line 3); comparing said at least two categories to decide whether there exists a mismatch



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1 therebetween (See Stewart Col. 3 Line 46 – Col. 4 Line 3); upon determination of the existence  
2 of a mismatch, classifying said digital object as a digital object possibly containing malicious  
3 content (See Stewart Col. 3 Line 46 – Col. 4 Line 3).

4 Regarding claims 24-25, and 127-128, Stewart disclosed that malicious content  
5 comprises malicious code, and masqueraded content (See Stewart Col. 1 Lines 21-39).

6 Regarding claims 26-28, 39-40, 44, 129-131, 142-143, and 147, Stewart disclosed that at  
7 least one of said at least two characteristics is selected from a set consisting of: header  
8 information; file content; file name extension; and file icon (See Stewart Col. 3 Line 46 – Col.  
9 4 Line 3 wherein the extension is header information).

10 Regarding claims 29-36, and 132-139, Stewart disclosed that said digital object is  
11 selected from a set consisting of: a file; an e-mail attachment; a web page; and a storage  
12 medium (See Stewart Col. 3 Lines 56-58).

13 Regarding claims 172-184, Stewart disclosed that said digital object information obtainer  
14 comprises a digital object information obtainer gateway subsystem; said characteristic based  
15 categorizer comprises a characteristic based categorizer gateway subsystem; said categories  
16 mismatch detector comprising a mismatch detector gateway subsystem; and said digital object  
17 classifier comprising a mismatch detector gateway subsystem (See Stewart Fig. 1 Element 102  
18 and Col. 3 Lines 28-45).

19 ***Claim Rejections - 35 USC § 103***

20 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all  
21 obviousness rejections set forth in this Office action:

22 *A patent may not be obtained though the invention is not identically disclosed or*  
23 *described as set forth in section 102 of this title, if the differences between the subject matter*

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1 *sought to be patented and the prior art are such that the subject matter as a whole would have*  
2 *been obvious at the time the invention was made to a person having ordinary skill in the art to*  
3 *which said subject matter pertains. Patentability shall not be negated by the manner in which*  
4 *the invention was made.*  
5

6 **Claims 15-16, 37-38, 45-66, 81-82, 140-141, and 185-206 are rejected under 35**

7 **U.S.C. 103(a) as being unpatentable over Curtis.**

8 Regarding claims 15-16, 37-38, 45, 59-60, 81-82, 140-141, 185, and 199-200, Curtis  
9 disclosed examining at least two different corresponding characteristics of a digital object;  
10 analyzing said at least two characteristics to determine whether there exists a mismatch  
11 therebetween; and upon determination of the existence of a mismatch, classifying said digital  
12 object as a digital object possibly containing malicious content (See the rejection of claim 1  
13 above), but failed to disclose that the characteristics may be selected by the creator of the digital  
14 object independently of selection of another characteristic and further failed to disclose that the  
15 object could be a web page or storage medium.

16 It was well known in the art at the time of invention that the creator of object, such as a  
17 file, would select the characteristics of that object. For instance, the creator of a music file  
18 would have selected that the content was music content, the extension was MP3, etc.  
19 Furthermore, it was well known in the art that web pages and storage mediums could contain  
20 malicious content and as a result should be checked for malicious content. It therefore would  
21 have been obvious to the ordinary person skilled in the art at the time of invention to employ  
22 what was known in the art in the virus protection of Curtis by allowing the creator of the file to  
23 specify the characteristics of the file. This would have been obvious because the ordinary  
24 person skilled in the art would have been motivated to provide a more flexible environment for

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1 the creator. It further would have been obvious to the ordinary person skilled in the art at the  
2 time of invention to employ what was known in the art in the virus protection of Curtis by  
3 checking for mismatches in web sites and storage mediums as well. This would have been  
4 obvious because the ordinary person skilled in the art would have been motivated to protect  
5 against malicious content in web pages and storage mediums as well as files and attachments.

6 Regarding claims 46-58, 61-66, 186-198, and 201-206, see the rejections of claims 2-14,  
7 and 17-22 above.

8  
9  
10 **Claims 15-16, 45-66, 81-82, and 185-206 are rejected under 35 U.S.C. 103(a) as being**  
11 **unpatentable over Le Pennec.**

12 Regarding claims 15-16, 81-82, 45, 59-60, 185, and 199-200, Le Pennec disclosed  
13 examining at least two characteristics of a digital object; analyzing said at least two  
14 characteristics to determine whether there exists a mismatch therebetween; and upon  
15 determination of the existence of a mismatch, classifying said digital object as a digital object  
16 possibly containing malicious content (See the rejection of claim 1 above), but failed to disclose  
17 that the characteristics may be selected by the creator of the digital object independently of  
18 selection of another characteristic and further failed to disclose that the object could be a web  
19 page or storage medium.

20 It was well known in the art at the time of invention that the creator of a digital signature  
21 could select what was being signed. Furthermore, it was well known in the art that web pages  
22 and storage mediums could contain malicious content and as a result should be checked for

1 malicious content. It therefore would have been obvious to the ordinary person skilled in the art  
2 at the time of invention to employ what was known in the art in the signature system of Le  
3 Pennec by allowing the creator of the file to sign whichever portions of the file the creator  
4 chose. This would have been obvious because the ordinary person skilled in the art would have  
5 been motivated to provide a more flexible environment for the creator. It further would have  
6 been obvious to the ordinary person skilled in the art at the time of invention to employ what  
7 was known in the art in the signature system of Le Pennec by applying the signature checking to  
8 web sites and storage mediums as well. This would have been obvious because the ordinary  
9 person would have been motivated to protect against malicious content in web pages and  
10 storage mediums as well as files and attachments.

11 Regarding claims 46-58, 61-66, 186-198, and 201-206, see the rejections of claims 2-14,  
12 and 17-22 above.

13  
14 **Claims 113-125, 172-184, and 231-243 are rejected under 35 U.S.C. 103(a) as being**  
15 **unpatentable over Curtis as applied to claims 67, 126, and 185 above, and further in view**  
16 **of Touboul et al. (US Patent Number 6,154,844) hereinafter referred to as Touboul.**

17 Curtis disclosed a system for detecting malicious content comprising: a digital object  
18 examiner (Implementer of Curtis), examining at least two different corresponding characteristics  
19 of a digital object (See Curtis Section 8); a characteristics mismatch detector (Implementer of  
20 Curtis), analyzing said at least two characteristics to determine whether there exists a mismatch  
21 therebetween (See Curtis Section 8); and a digital object classifier (Implementer of Curtis),  
22 operative upon determination of the existence of a mismatch, classifying said digital object as a

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1 digital object possibly containing malicious content (See Curtis First Paragraph and Section 8),  
2 but failed to disclose the system being implemented in a gateway.

3 Touboul teaches that in order to protect a network, protection such as determining  
4 suspicion of downloadable content should be applied in a gateway (See Touboul Col. 5 Lines 13-  
5 33).

6 It would have been obvious to the ordinary person skilled in the art at the time of  
7 invention to employ the teachings of Touboul in the virus protection system of Le Pennec by  
8 applying the protection in a gateway. This would have been obvious because the ordinary person  
9 skilled in the art would have been motivated to protect the network from transmitting malicious  
10 content.

11  
12  
13 **Claims 113-125, and 231-243 are rejected under 35 U.S.C. 103(a) as being**  
14 **unpatentable over Le Pennec as applied to claims 67 and 185 above, and further in view of**  
15 **Touboul et al. (US Patent Number 6,154,844) hereinafter referred to as Touboul.**

16 Le Pennec disclosed a system for detecting malicious content comprising: a digital object  
17 examiner, examining at least two different corresponding characteristics of a digital object (See  
18 Le Pennec Paragraph 0192); a characteristics mismatch detector, analyzing said at least two  
19 characteristics to determine whether there exists a mismatch therebetween (See Pennec  
20 Paragraph 0192); and a digital object classifier, operative upon determination of the existence of  
21 a mismatch, classifying said digital object as a digital object possibly containing malicious

1 content (See Le Pennec Paragraph 0198), but failed to disclose the system being implemented in  
2 a gateway.

3 Touboul teaches that in order to protect a network, protection such as determining  
4 suspicion of downloadable content should be applied in a gateway (See Touboul Col. 5 Lines 13-  
5 33).

6 It would have been obvious to the ordinary person skilled in the art at the time of  
7 invention to employ the teachings of Touboul in the virus protection system of Le Pennec by  
8 applying the protection in a gateway. This would have been obvious because the ordinary person  
9 skilled in the art would have been motivated to protect the network from transmitting malicious  
10 content.

11 **Claims 37-38, and 140-141 are rejected under 35 U.S.C. 103(a) as being**  
12 **unpatentable over Stewart.**

13 Stewart disclosed a method of detecting malicious content comprising: obtaining  
14 information relating to at least two different corresponding characteristics of a digital object (See  
15 Stewart Col. 3 Line 46 – Col. 4 Line 3); analyzing said information to categorize said digital  
16 object into at least two categories (See Stewart Col. 3 Line 46 – Col. 4 Line 3); comparing said at  
17 least two categories to decide whether there exists a mismatch therebetween (See Stewart Col. 3  
18 Line 46 – Col. 4 Line 3); upon determination of the existence of a mismatch, classifying said  
19 digital object as a digital object possibly containing malicious content (See Stewart Col. 3 Line  
20 46 – Col. 4 Line 3), but failed to disclose that the object could be a web page or storage medium.

21 It was well known in the art that web pages and storage mediums could contain malicious  
22 content and as a result should be checked for malicious content.

1           It would have been obvious to the ordinary person skilled in the art at the time of  
2   invention to employ what was known in the art in the virus detection system of Stewart by  
3   applying virus detection to web pages and storage mediums as well. This would have been  
4   obvious because the ordinary person would have been motivated to protect against malicious  
5   content in web pages and storage mediums as well as files and attachments.

6           **Claims 41-43, and 144-146 are rejected under 35 U.S.C. 103(a) as being**  
7   **unpatentable over Stewart as applied to claims 23, and 126 above, and further in view of**  
8   **Pasawicz (“The Importance of File Extensions”).**

9           Stewart disclosed a method of detecting malicious content comprising: obtaining  
10   information relating to at least two different corresponding characteristics of a digital object (See  
11   Stewart Col. 3 Line 46 – Col. 4 Line 3); analyzing said information to categorize said digital  
12   object into at least two categories (See Stewart Col. 3 Line 46 – Col. 4 Line 3); comparing said at  
13   least two categories to decide whether there exists a mismatch therebetween (See Stewart Col. 3  
14   Line 46 – Col. 4 Line 3); upon determination of the existence of a mismatch, classifying said  
15   digital object as a digital object possibly containing malicious content (See Stewart Col. 3 Line  
16   46 – Col. 4 Line 3), but failed to disclose checking the icon of the object as well in order to  
17   determine suspiciousness of the object.

18           Pasawicz teaches that there are many telltale signs of malicious files including icon  
19   “faking” in which the icon does not match the file type in order to mislead a user into thinking  
20   the file is one type (i.e. an image file) when it is actually a different type (i.e. an executable file)  
21   (See Pasawicz Page 5 Col. 1).

It would have been obvious to the ordinary person skilled in the art at the time of invention to employ the teachings of Pasawicz in the virus detection system of Stewart by checking the icon type in addition to the extension and content types for coincidence. This would have been obvious because the ordinary person skilled in the art would have been motivated to apply the known signs of a malicious file to the detection system in order to trap the most “viruses” as possible.

## Conclusion

Claims 1-88, 113-147, 172-206, and 231-243 have been rejected.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Rosenthal (US Patent Number 5,359,659) disclosed determining suspicious files based on the filename vs. file extension.

b. Houser et al. (US Patent Number 5,606,609) disclosed determining suspicious files based on the icon vs. the content.

c. Chen et al. (US Patent Number 5,951,698) disclosed determining suspicious files based on the extension and the content.

d. Bates et al. (US Patent Number 6,721,721) disclosed checking web pages for viruses.

e. Tsai (US Patent Application Publication 2003/0097409) disclosed parsing an E-mail header and attachments for suspicious content.



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1 Applicant's amendment necessitated the new ground(s) of rejection presented in this  
2 Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

3 Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


4 A shortened statutory period for reply to this final action is set to expire THREE  
5 MONTHS from the mailing date of this action. In the event a first reply is filed within TWO  
6 MONTHS of the mailing date of this final action and the advisory action is not mailed until after  
7 the end of the THREE-MONTH shortened statutory period, then the shortened statutory period  
8 will expire on the date the advisory action is mailed, and any extension fee pursuant to 37  
9 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,  
10 however, will the statutory period for reply expire later than SIX MONTHS from the date of this  
11 final action.

12 Any inquiry concerning this communication or earlier communications from the  
13 examiner should be directed to Matthew T. Henning whose telephone number is (571) 272-3790.  
14 The examiner can normally be reached on M-F 8-4.

15 If attempts to reach the examiner by telephone are unsuccessful, the examiner's  
16 supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the  
17 organization where this application or proceeding is assigned is 571-273-8300.

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1 Information regarding the status of an application may be obtained from the Patent  
2 Application Information Retrieval (PAIR) system. Status information for published applications  
3 may be obtained from either Private PAIR or Public PAIR. Status information for unpublished  
4 applications is available through Private PAIR only. For more information about the PAIR  
5 system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR  
6 system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

7  
8  
9   
10 Matthew Henning  
11 Assistant Examiner  
12 Art Unit 2131  
13 4/3/2006

CHRISTOPHER REVAK  
PRIMARY EXAMINER

*Cell 4/9/06*